

**The Environmental protection and reforestation
project in the Brazilian Cerrado; Jardim de
Juramidam**



Jardim de juramidam: Reforestation and environment protection

Problem:

Global warming is one of the biggest challenges of our era. Unfortunately, we have arrived at a point where the consequences of inaction are dire. The Stern Review (2006) made society aware of the substantial consequences shared by both human beings and the environment in the event of merely a raise of a few degrees in temperature. The consequences seem devastating to an area already affected by malaria (augmentation of 40-60 millions of victims for a temperature increase of 2 degrees), reduction of drinking water sources, increase of sea level, strong climate immigration or reduction of resources... All these consequences have direct impacts on our society.

The science is clear. The main cause of global warming is the greenhouse gas (GHG) emissions from human activities. Sources of GHG are numerous: road and air transportation; heating and electricity; agriculture and deforestation. Deforestation, in particular, represents 18.3 % of total GHG emissions. In addition to the impact on the climate, this phenomenon is also the leading cause of species extinction and a significant source of water pollution, air pollution, soil erosion, and the impoverishment of rural communities.

As we believe humans are the main cause of this phenomenon, we, at Friends of Humanity, believe we have an obligation to fight against global warming.

Situation in the Cerrado:

Located in central-western Brazil, this savanna covers 2 million km² of land representing 23% of the entire area of the country. This region has unique fauna and flora and one of the richest biodiversities in the world (constituting one third of Brazilian and 5% of the world biodiversity).

In their evaluation of environment conservation, the WWF and the World Bank have assessed this region as vulnerable and placed utmost importance on its

protection.



Despite its unique biodiversity and warnings from NGOs, a large part of the region has been transformed into pasture and Soya fields. This practice jeopardizes traditional farming and other activities of the local population. For millennia, the native vegetation has provided materials for housing (timber, palm, thatch, etc.), seasonal fruits, fibre, firewood and many other products for the rural economy (Ratter et al. 1997). During the last 25 years, the Cerrado has been extensively developed for intensive agriculture, and in so doing, has altered the natural biodiversity of the land. A recent study has estimated that the Cerrado has lost half of its original vegetation (1 million of Km²). According to Carlos Minc, Brazil's Environment Minister, damage to Brazil's vast Cerrado grassland results in greenhouse gas emissions equivalent to those produced by destruction of the Amazon rainforest. The current wave of deforestation has been incited largely from the need to feed occidental cattle to satisfy the demands of the export market. This increase in cattle farming itself has amplified the environmental destruction in the region ; as the methane emitted by manure from agriculture globally accounts for 5.1% of total GHG emissions.

Jardim de Juramidam



Currently, less than five percent of the original two million square kilometers of Cerrado is protected. Devoted to the cause of protecting the region's wildlife and replant deforested areas, Friends of Humanity is steadfast in its commitment in the project of Jardim de Juramidam. This

area of 57 hectares is located near the village of Alto Paraiso in Goiás. As hundreds of indigenous fruit trees and floral species return to the area, there is already a notable improvement in the situation. In this forest, there are two mountains and also two rivers. In addition to native floral species, monkeys, tattoos, butterflies and many birds help add to the incredible biodiversity of Jardim de Juramidam. In this project, FOH is adopting a holistic approach by integrating the social and economic reality of the local population with the ecological interests of the region.

Ecological impact:

By protecting the zone from hunters, woodcutters, fires and cattle; the fauna, flora, and rivers are preserved. In balancing with the agriculture needs of the local population, fruit trees are grown organically using a

technique called “agroforestry”. Agroforestry is the farming method where trees are planted over medicinal herbs or other small plants. That allows the agriculture to preserve the harmony of the forest; helping to improve the allocation of water so that naturally indigeous species will grow back. By preserving the area and reforesting ecologically sensitive zones, the Jardim de Juramidam project contributes to combating climate change.

Social and economic impact:

This project has a profound social impact. The construction and reforestation crews are comprised largely of marginal and native people from the local villages. This project gives hope and dignity back to these people who have in the past been marginalized.

Production of handcrafted products made from the dried fruits of the planted trees are also potential sources of profit. Additionally, an ecotourism center is planned on being constructed where tourists will be allowed to participate in the day-to-day activities of the village. It is hoped that this ecotourism project will bring additional revenues to Jardim de Juramidam as well as the region.

Spiritual Impact:

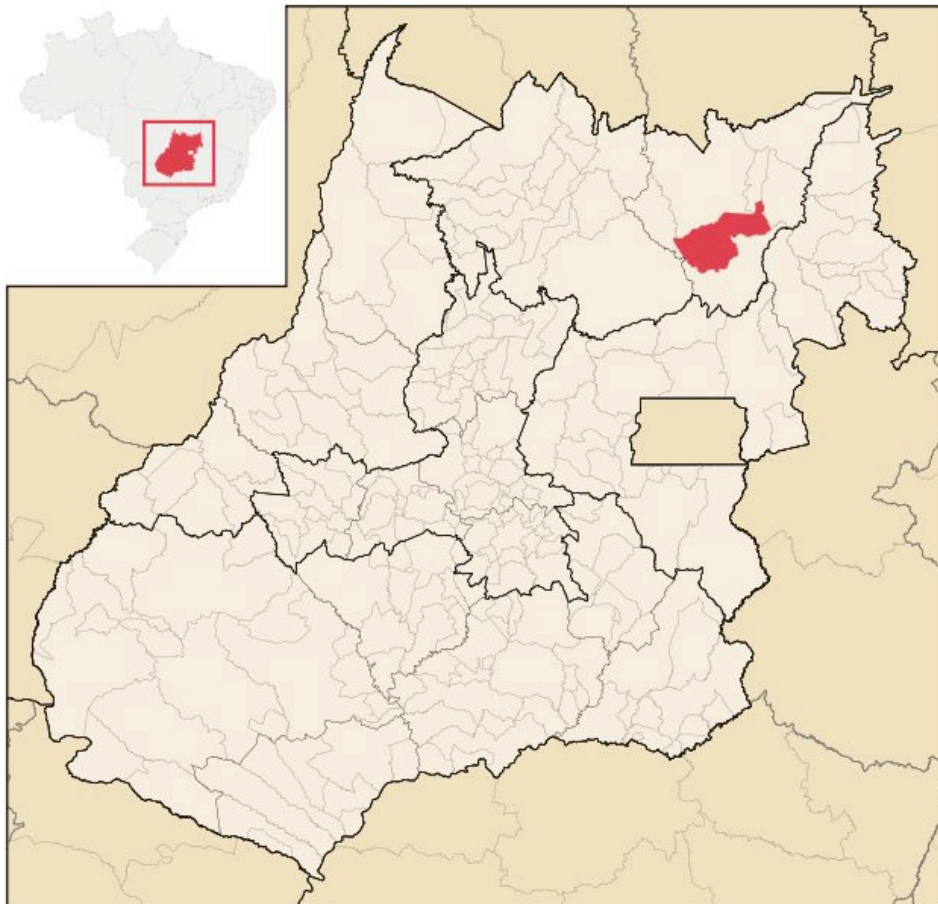
A part of the project is to help people to become more peaceful and conscious. A wish is to become a point of light, a center of healing and

meditation, where people with the help of the contact with nature and spiritual works can awake a new consciousness.

Projects to come:

- Expand the current project by buying adjacent, deforested land.
- Develop a technique to dry fruits solely by sunlight, further increasing the ecological impact of the project.
- Building an irrigation system for dry season
- Installing “dry toilets”, which do not require any water to operate.
- Increasing the amount of handcrafts made of natural and local material
- Build an ecotourism lodge

Map:



Budget for 2010

Budget for the eco-tourism project (2 lodges) :

Fondation	3m ³ of white sand	207 R\$
	1m ³ of gravel	66 R\$
	4 barres de fer 1/4	76 R\$
	12 s of cement	240 R\$
Flooring :	Beam 5x14 cm, 5 x 6 m	454 Ré
	Parquet floor	1'886 R\$
Wall :	Beams 5 x 11 cm, 8 x 2.5 m	227 R\$
	Beams 5 x 11 cm, 3 x 3.5 m	119 R\$
	Rafter 5 x 5 cm, 12 x 2.50 m	192 R\$
	« Pinus » 42 m ²	1'440R\$
	A door and two windows	1'050 R\$
	Screws and nails	315 R\$
	Sealer 3.2 lt 6	408 R\$
Roof	Beams 5 x 14 cm 3 x 6 m	279 R\$
	Beams 5 x 11 cm, 14 x 2.5 m	397 R\$
	Strip of wood 3.5 x 5 cm, 16 x 7.5 m	768 R\$
	Roofing	860 R\$
Work	Transport	500 R\$
	Labor	3'000 R\$
	Administration (15 %)	1'872 R\$
	1 lodge	14'356 R\$
Total costs	2 lodges	28.712 R\$
	in CHF	16'957 CHF

Other costs

Staff	Salary for maintenance crew 1.5 people (forestry, protection...)	36'720 R\$
Forestry management	Tree Nursery	5'100 R\$
	Forestry equipment (tools, seed...)	3'000 R\$
	Fire Combat equipment	2'800 R\$
Administrative costs	1 Computer	1'275 R\$
	Other office material (printer, paper, chairs, tables...)	1'085 R\$
	Tel.+ Internet	612 R\$
Total costs project	In R \$	50'592 R\$
	In CHF	29'879 CHF



Example of Jardim de Juramidam's lodge

You would like to contribute to the reforestation of the Brazilian Cerrado :

Name : Friends of Humanity
Bank: UBS
Location: Geneva
Account number: 0240-417080.01W
IBAN: CH260024024041708001W
BIC: UBSWCHZH80A

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